AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the Application.

1. (Currently Amended): An exterior surface treated article comprising ~~made of~~ a bulk-solidifying amorphous alloy having a mechanically treated exterior surface and having improved durability and fatigue resistance over a similar article without said mechanically treated exterior surface, the mechanically treated exterior surface comprising~~: an exterior surface; and~~ a plurality of deformations in the exterior surface~~, wherein the deformations result from a mechanical surface treatment process applied to the exterior surface~~.

2. (Currently Amended): The article of claim 1, wherein the deformations result from a mechanical surface treatment process applied to the exterior surface~~wherein the surface treatment process is a shot-peening process~~.

3. (Currently Amended): The article of claim 2, wherein the surface treatment process is a shot-peening process~~wherein the shot-peening process is applied to a substantial portion of the exterior surface~~.

4. (Currently Amended): The article of claim ~~2~~ 3 wherein the shot-peening process comprises a shot having a diameter of approximately 0.006 inches to 0.040 inches.

5. (Currently Amended): The article of claim 1 wherein the treated article is a golf club face insert or a shaft.

6. (Original): The article of claim 1 wherein the surface treatment process is a laser shock peening process, wherein the deformations are formed by a shock wave that ablates a portion of the exterior surface.

7. (Original): An article of bulk-solidifying amorphous alloy having an exterior surface with a plurality of deformations therein, wherein the deformations alter the exterior surface such that the article has improved durability and fatigue resistance as compared to a substantially identical article lacking the deformations in the exterior surface.

8. (Currently Amended): A method of improving the durability and fatigue resistance of an exterior surface treated article made from bulk-solidifying amorphous alloy, comprising:

applying a shot-peening process to at least a portion of an exterior surface of the article; and

creating a plurality of deformations in the exterior surface by mechanically compressing a plurality of shots against the exterior surface to create a mechanically treated exterior surface,

wherein the article has an improved durability and fatigue resistance over a similar article without said mechanically treated exterior surface.

9. (New): The article of claim 3, wherein the shot-peening process is applied to a substantial portion of the exterior surface.

10. (New): The article of claim 1, wherein the improved durability and fatigue resistance is demonstrated as improved peak load for failure and increased cycles to failure under fatigue cycling.

11. (New): The article of claim 10, wherein a ratio of the peak load for failure of the article versus the similar article is over 33/23.

12. (New): The article of claim 10, wherein a ratio of the peak load for failure of the article versus the similar article is over 33/27.

13. (New): The article of claim 10, wherein a ratio of the cycles to failure under fatigue cycling of the article versus the similar article is more than 30/2.

14. (New): The article of claim 10, wherein a ratio of the cycles to failure under fatigue cycling of the article versus the similar article is more than 30/9.

15. (New): The article of claim 10, wherein a ratio of the cycles to failure under fatigue cycling of the article versus the similar article is more than 15/2.

16. (New): The article of claim 10, wherein a ratio of the cycles to failure under fatigue cycling of the article versus the similar article is more than 15/5.

17. (New): The article of claim 10, wherein a ratio of the cycles to failure under fatigue cycling of the article versus the similar article is more than 30/5.

18. (New): The article of claim 1, wherein the bulk-solidifying amorphous alloy comprises a ferrous alloy.

19. (New): The article of claim 1, wherein the bulk-solidifying amorphous alloy comprises a Ni-containing alloy.

20. (New): The article of claim 18, wherein the bulk-solidifying amorphous alloy is a ferrous alloy comprising Fe, Ni and Co.

21. (New) The article of claim 1, wherein the bulk-solidifying amorphous alloy has the glass transition temperature of 550°C or above.

22. (New): The article of claim 1, wherein the bulk-solidifying amorphous alloy has the glass transition temperature of 500°C or above.

23. (New): The article of claim 22, wherein the bulk-solidifying amorphous alloy comprises a composition being represented by the following general formula:

$Ni_a (Zr_{1-x} Ti_x)_b Si_c$

where a, b and c are atomic percentages of nickel, zirconium plus titanium and silicon, respectively, and x is an atomic fraction of titanium to zirconium, wherein;

45 atomic % ≤ a ≤ 63 atomic %,

32 atomic % ≤ b ≤ 48 atomic %,

1 atomic % ≤ c ≤ 11 atomic %, and

0.4 ≤ x ≤ 0.6.

24. (New): The article of claim 23, wherein the bulk-solidifying amorphous alloy further comprises V, Cr, Mn, Cu, Co, W, Sn, Mo, Y, C, B, P, Al, or combinations thereof.

25. (New): The article of claim 22, wherein the bulk-solidifying amorphous alloy comprises a composition being represented by the following general formula:

$Ni_d (Zr_{1-y} Ti_x)_e P_f$

where d, e and f are atomic percentages of nickel, zirconium plus titanium and phosphorus, respectively, and y is an atomic fraction of titanium to zirconium, wherein;

50 atomic % ≤ d ≤ 62 atomic %,

33 atomic % ≤ e ≤ 46 atomic %,

3 atomic % ≤ f ≤ 8 atomic %, and

0.4 ≤ y ≤ 0.6.